RM User

Volume 12:1
May 1997

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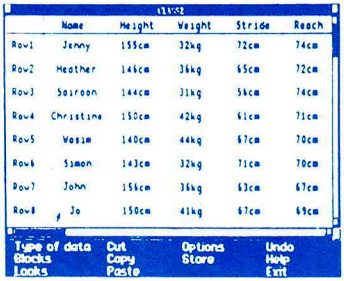

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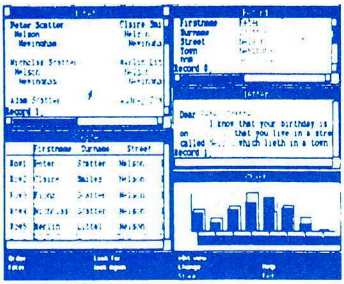

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Contents

Software Production Associates 2
Contents 3
Deadlines for the next issues 3
Missing a Magazine? 3
Committee, Ad Rates 4
News and Editorial 5
Intereat 6
Year 2000 8
Maths and Excel 9
PDAs 11
From Now On 12
Compuserve Files 15
RM Direct 18,19
Training Weekend 23
Micromart & Bits and Pieces 24
News 25
Peter the Printer 29
Got A Problem? 33
Membership Form 34
Edhitec 35
FLO 36

Deadlines for the next issues

RM User 12.2 ..... 20 June 1997
RM User 12.3 ..... 30 September 1997

The date shown above is the ***latest*** date for copy for the magazine. You will normally receive the magazine about 2-3 weeks after the date shown.

Missing a Magazine?

Back issues of the magazine are available from the editor - please contact me for more details. I am trying to find time to update our web pages and there is a chance we may get the URL www.rmug.org. Is there anyone out there who might like to help manage the pages? There is already a list of phone numbers of the suppliers who have been reviewed in the past and I am open to suggestions for or help with expansion of the pages.

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Advertising in the Magazine

Full and half page advertisements can be placed in the magazine and details can be obtained from the Advertising Manager. We also take classified ads and members may place free ads for surplus equipment in MicroMart.

Rates

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NEWS AND EDITORIAL

Apologies - again

This is very strange. I wrote a long and (I thought) quite graceful apology for this issue being so late - and it has vanished!! I placed the story, wrote and polished it and it has just disappeared. Maybe it is the same gremlins that have been eating the cursors on one of my Windows 95 machines every time I install its sound card. Anyway, I am trying again. If this page is blank then you will know that I have failed! I have to tell you that my biggest problem is still a lack of contributed articles. Please do 'have-a-go'. It is not as painful as you think and it IS nice to see your efforts in print.

An inspector calls

We got inspected a few weeks ago. Thirty percent of the summary of the report was devoted to saying that IT here is underfunded, understaffed and, as a result, not delivered consistently across the curriculum. I applauded their findings and pointed out that I have been saying this for years.

I have enjoyed every inspection I have been involved in. I am not vain enough to think I know it all and I find it useful to have a fellow professional looking over my shoulder to spot things I cannot see because I am involved in the process. Having said that, I certainly think the process has become unwieldy, has far too much paperwork and has a great potential for strangling individuality in teaching style. I feel this is particularly sad since it is the eccentric teachers that I remember most clearly - even now, so many years on.

The road ahead is littered with . .

The machine I mentioned above is the one on which I have been trying to install our MSN account. This process has turned out to be a classic Catch 22 job. Each stage has required one extra key piece and when installed, that has reset other bits which have then needed re-installing. At one point it was all functioning beautifully, fast downloads and lots of multimedia things going on. The only problem was that at some point, the sound card had gone very quiet. I finally got it going again - and discovered that all the cursors had gone to some form of cursor limbo.

Do you feel secure?

There have been some extra-ordinary breaches in computer security. I think I mentioned previously that Scotland Yard had been visited by hackers - well they are not alone. Some (allegedly) Swedish hackers got into the CIA site and made some witty changes. Then someone broke into the computers in CERT in this country. You may not have heard of CERT but they are responsible for advising large companies on . . . computer security. To make matters worse, they had been surveying which big companies were vulnerable and it was the results of this survey, along with the software they had used to get in, that was electronically hijacked. I couldn't help laughing - but it is most definitely not a laughing matter. Apparently the Pentagon is under ceaseless electronic attack and the attackers 'often' get in. The possible consequences of this success could well make the Millenium problem insignificant.

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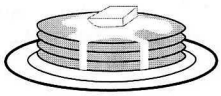
INTEREAT

by Diana Rolf

I don't know how the sad jerks who trawl the Net for pornography process their catch, but I can happily report that virtual food is absolutely nothing like the real thing. I sat down to review these sites after a day when I had (most unusually!) missed lunch, so I fully expected to be gnawing chunks out of the table by the end. I didn't leave so much as a toothmark.

First stop was, naturally, for breakfast. Kellog's Rice Krispies at http://www.treatsrecipes.com/ is becoming a famous site, and it's certainly bright and cheery. Unfortunately it uses a heavy mix of frames and spectacular graphics which you'd be hard pressed to load before noon. I popped into the famous Recipe section to see if I could extend my (severely limited) range of uses for RKs. But the recipes look suspiciously like the 'Roast-turkey-and-two-veg-with-added-Rice-Krispies' variety written up by admen for packet-backs, not the sort you cook.



On to Cheesenet, at http://www.wgx.com./cheesenet/, which is a handsome site all about - you guessed - cheese. It has a World Cheese Index, Cheese Information, even Cheese Literature, which has a definite smack of the office-nerd's teabreak about it - some doubtful stuff here - faintly amusing, but sheds an uncertain light on the genuinely informative pages in the site. There's even a section called Fun with Cheese, but they're still working on that one (it would take me a while!). Food Resource at http://www.orst.edu/food-resource/food.html is the next best thing to an encyclopedia. After an unpromising start, while a large and scruffy graphic plods into view, the site settles down into some really useful stuff. A vast, plain table (geddit?) has simple links to a huge variety of foods. The links give you photos or text, so it really is easy to negotiate and just the thing for school H.E. projects - 'Cauliflower' led to a choice of pix (should you need reminding), and additional info on cauliflower production and harvesting. One item was a 'Shortened cake'. A legless Angel, right? Wrong - 'shortening' is USpeak for baking powder, so you see a fluffy, beautifully risen Victoria Sponge on a wire rack (not like some of mine!). All good, sensible stuff, but no need for the doggy bag here - definitely more on the academic side. Next I tried The World Guide to Vegetarian Pages at http://catless.ncl.ac.uk/veg/, which is a solid, dependable site for Veggies. I was vegetarian once, but it didn't last. Deep down I'm at ease with the idea of gorging on a slab of flesh, sinking a few Mammoth XXXXs and holing up in the back of the cave for a few days to get on with something more interesting. But when you're a Vegetarian you can't do this. You

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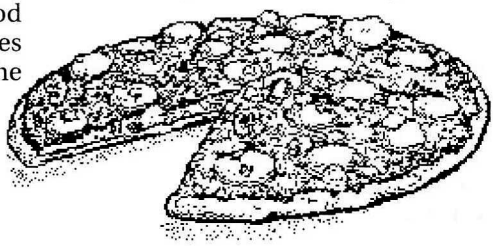
have to take food Seriously - it can't be much fun dragging down a broccoli by the water hole if it doesn't even struggle, dammit! And there's a lot of cabbage to get through before you reach the nutrition levels of a small eland's elbow. So I scoured the site for the flavour (slaver!) and variety (drool!) so essential to the veggie diet, but found nothing much to whet the appetite. In fact the site was pretty much like all the Vegetarians I know - bright, clean, well-presented, helpful, and above all, committed - it even has a page on Vegetarian Cruises (two months on a shipful of veggie Septuagenarians? Wild!).

So, being more of a steak-and-chips kinda gal, I called in at Girls Who Eat Ribs at http://gwer.com/contents.html. The Miss Piggy lookalikes in the title graphic aren't too appealing (catty? moi?), but I was struck (well, splattered) by the bright and somewhat repetitive graphics of crudely drawn ribs in paper cups on checkered tablecloths. The site might equally have been called Girls Who Eschew Reading, being somewhat textually-challenged. Sections include 'Little Red Riding Rib', 'Being taken for a Rib' - you get the idea. Cheerful enough, but a like real-life Diner, no place to linger.

So on to dessert. If there's one food that makes me go weak at the knees it's ice cream. I like it so much that the whole concept of advertising it mystifies me. Were I the sole customer the GDP of several Banana Republics could have been shored up by the millions wasted on advertising - a cleft stick with a bit of card directing me to the nearest freezer cabinet would suffice. And I usually enjoy it in inverse proportion to the gloss of the sales pitch - like that expensive foreign one, which is so dull even the couple in the ad wipe it all over themselves in a desperate attempt not to eat it. Still, I couldn't resist a visit to Ben & Jerry's Homemade, at http//www.benjerry.com/indexg.html. This is a spectacular site - big, bright and beautiful. It opens up into sections which have surprising depth, like a link in the text to cotton, (the conceptual link is to t-shirts worn by the factory staff) which brings up a whole section on cotton planting, cotton growing, pesticides, organic cotton, all carefully pressed and laid out on a lovely, soft denim ground. But I fell in love with the Graveyard - where three apparently Failed Flavours (surely not!) - 'Fred'n'ginger', 'Ace Milk' and Misissippi Mud' - r.i.p. on dinky tombstones. Evil greeney-yellow eyes blink and peer from behind them, and into the middle whirls a trio of exquisite little skeletons who dance the can-can. Lunchless as I was, I couldn't tear myself away, and I gazed at the little skeletons till the Cleaner squawked at me to go home.



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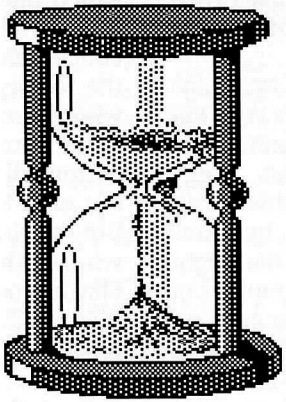
A COMMENT ON THE YEAR 2000 PROBLEM

The Current Situation

RM's dedicated team of highly trained and professional validation engineers are currently investigating the consequences of the 'roll over' from 1999 to the year 2000 and how this might affect any of our customers. A full and comprehensive report will be available by the end of May.

Until then we are confident that all current systems and networks, in terms of the hardware, BIOS and operating system, are Year 2000 (Y2K) compliant and will handle the 'roll over' without any problem[1].



"Media Hysteria"

Media interest in the issue has caused a lot of confusion amongst customers who feel that they have been mistreated by the IT industry and that all computers are guaranteed to collapse at the turn of the century.

Personal computer owners will not have the same problems as old main-frame computers which are more susceptible to the 'roll over' problem because of old technology built in to the hardware. So whilst it is true that industry has good reason to worry, personal customers/ schools should not feel that they will incur massive costs to guarantee Y2K compliance.

The RM Solution

RM does not believe that solving any problems that may arise from Y2K compliance will prove insurmountable and we would recommend our customers to wait until we have produced a definitive programme before deciding on a course of action.

RM considers highly its responsibility to its customers and that they should feel confident with any of our systems or networks. We consider it a priority to assure our customers that the systems or networks that they have bought from us will continue to be excellent value into the new millennium.

1 We cannot guarantee the performance of all third part software products

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SOME IDEAS FOR MATHS COURSEWORK USING EXCEL

by Glenn Taylor

I'm sure that most maths teachers are familiar with the Max Box problem, where it is necessary to determine the dimensions of an open box, folded from a given sheet of card and which has the maximum possible volume. Although a mathematician would use calculus to solve this problem, it is a suitable task for an intermediate band GCSE student using Excel and trial-and-improvement techniques, and it is frequently used as a piece of coursework at that level. The purpose of this article is to share a few of my own coursework ideas (together with one or two old ideas in a new guise).

1. Max Box revisited

A3 card measures 29.7cm x 42cm. By cutting equally sized squares from each corner it is possible to fold the remaining card to form a box without a lid.

If the squares cut off measure 3cm x 3cm, what is the height, length and width of the resulting box? What is its volume?

What size squares need to be cut off to give the box with the maximum volume? What are the dimensions of this box and what is its volume?

Extension Problem

A toy manufacturer uses the above method for making cardboard boxes. Boxes are needed for holding a new range of cubical building bricks of side 4cm.

Advise the company on sizes of suitable boxes made from A3 card for holding a set of 20 bricks and also for a larger set of 40 bricks.

Note that the lid of the box is manufactured separately and may be ignored. Additionally it is important that the bricks fit entirely into the box, fitting loosely so that they can be taken out and replaced easily.

Comments:

The main problem is the unadulterated Max box problem, although using A3 card. The extension problem is more interesting and may be adapted so that the student instead finds the most cubes which can be made to fit. Using the box with maximum volume does not give the solution.

2. Max Cone

A circle of card has a radius of 10cm. A sector is cut from the card and the remainder is folded to make a cone.

Problem:

How big a sector must be removed in order to produce the cone which has the greatest volume?

Comments:

This is a much harder problem than Max Box and is probably only suitable for top maths sets.

cont . . .

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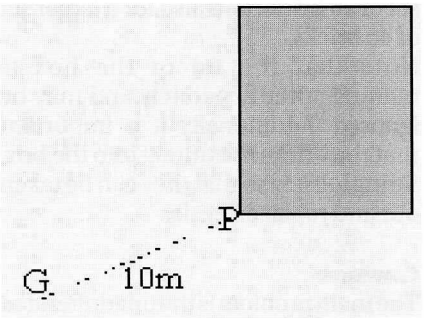
3. Feeding the Goat

A large field contains a fenced-off rectangular vegetable plot of perimeter 20m. A goat G is tethered to one of the corners P of the vegetable plot by means of a 10m rope.

What are the dimensions of the vegetable plot which give the goat the maximum grazing area?



Comments:

This is a straightforward problem only needing knowledge about areas of circles and partial circles. Since the answer is always when the vegetable plot is a square, there are opportunities for the student to make conjectures and generalisations. If you change the given dimensions, however, beware of making the rope longer than half the perimeter of the vegetable plot as this gives rise to overlapping regions making the grazing area somewhat difficult to calculate.

4. Drains

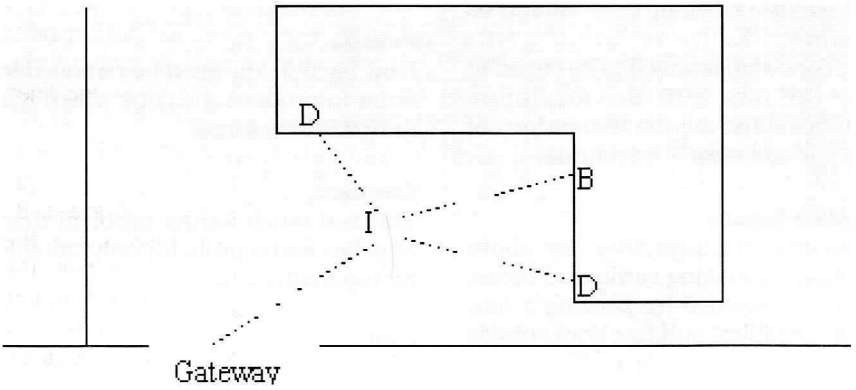
The diagram below shows part of a plot of land upon which a new house is being built. The builders need to lay the drains from the gateway to an inspection hatch (I) and from there to each of two drainpipes (D) and the bathroom (B).

Where would you put the inspection hatch in order to minimise the total amount of pipe which is needed?

Comments:

I haven't given any measurements for this problem so make up your own. Although the problem only needs knowledge of Pythagoras Theorem, it does involve two unknown quantities making up the [x,y] coordinates of the position of the inspection hatch (with the gate as the origin, for instance). Because of this, the problem is probably best suited to higher ability students.

I hope that these problems are found to be useful by maths teachers. More to follow next time.



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PDA'S

by David Palmer

I have been road-testing a USRobotics Pilot. In case you've been in a cave for the last few months, this palmtop model is a **little** computer - and that is its most immediate charm. It is very, very slick - but, and you KNEW there was a but, there are a few details that surprised me. In order, no graphics, no tone dialling and no stop watch. Oh, and the plastic carry case is truly naff. In memo pad, it is smart enough to know that you are going to start with a capital letter but not smart enough to know that you are going to want one after a full stop. I love the Hot-sync cradle. You pop the Pilot into it and press a button and it will synchronise your palmtop files with those held on your desktop computer. I did have problems installing the desktop s/w on Windows 3.1 but none at all with Windows 95. It was almost straight forward to import the data which I had archived from the Psion, although I couldn't figure out how to do it without losing a few bits from the edges of some of the records. As a rule of thumb, if you keep your records on single screens and ignore the Psion's excellent scrolling, you will have no problems. Once you have Hot-synched with the Pilot desktop, you can drag and drop your data into Word or Excel. I understand that it is very easy to import or export to or from Lotus Organiser. The alarm sound is hopeless - 3 little double beeps which are not repeated.

Omnigo 100

There can be no doubt that the HP Omnigo is a nice piece of kit. I can remember when I first got a Psion, RM's Schools Manager got an Omnigo. Even then I was aware that the Omnigo was somehow more of a computer. It surely cost more. Now I have just bought one for about half the price of a Psion. A huge benefit is the ability to record ideas in the form of diagrams drawn with the stylus (or a fingernail!) One of the few flaws in its performance is that the calculator fails the (10/3)*3 test - it gives the answer 9.9999999999. This is particularly odd since the calculator is loaded with serious mathematical functions and the spreadsheet returns the correct answer of 10. The slightly joky Pilot version, with only basic functions, sails through the same test. One of the many nice things about the HP, which should be included in every PDA as a matter of course is a stopwatch/timer function. Other features include a diary/apppointment book - which can show up to four months. A small ommission is the lack of any indicator to show which dates contain a note. Here again I am amazed that the claimed resolution of the screen is 240 by 240, it seems much finer than that. This is the case also with the hypertext book reader. It comes with one small book with a lovely illustration on the first page. Then you have the usual phone/address book - strangely no tone dialling function. There is a neat function that allows you to rotate the screen display by 90 degrees. Be warned though that this disables the keyboard so if you have enabled the password function, you will need to know how the Graffiti strokes to make your password. Also, there is no file manager.

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IN DEFENSE OF TEXTBOOKS, LECTURES AND OTHER AGING TECHNOLOGIES

by Jamie McKenzie

For the full, hyperlinked version of this issue as well as an excellent article on the ethics of Digital Photography, make sure to visit FROM NOW ON - THE EDUCATIONAL TECHNOLOGY JOURNAL
http://fromnowon.org
** Note from the Jamie. . .
In June I will be leaving the Bellingham Schools to return to private practice as an editor, consultant and speaker. After four years of exciting growth and experimentation, I wish to devote myself more fully to my writing.
I will be completing several books during the next year and working with several large clients as they explore ways to make the best of the new information technologies.
Best wishes, Jamie McKenzie ***

The old technologies still have a place in the classroom. We can ill afford to throw away the textbook or banish the lecture. They serve a purpose. They filter, they focus, they organize and they deliver complex subjects like U.S. history and biology in manageable, digestible chunks and bites.

The challenge facing schools in an Age of Information is finding the right balance between these time-honored delivery systems and the more student-centered learning styles which are made possible by the new information technologies.

I. The Advantages of Textbooks and Lectures

Schools cannot take the time to study the entire American story "from scratch." We need secondary sources. We need reliable, trained interpreters. We need editors who will provide some degree of quality control.

Textbooks . . . What do good textbooks do for us?

They compact and synthesize immense bodies of knowledge. They simplify and condense the story. They organize and translate complex disciplines.

They provide teachers and students with a clear path, a learning TripTik, if you will.

They take us on a quick tour of subject matter which could easily occupy a lifetime. "Start here . . . go there . . . read this . . . look at this picture . . . read this segment of a diary . . ."

Lectures . . . And what do good lectures accomplish?

They (like textbooks) compact the immense and complex into small, bite size meals which fit into 40 minute class periods like a hand in a glove.

Done well, they translate academic material into the language and terms of Today. A good lecturer transforms the events of an April Morning at Lexington and Concord into terms which awaken the interest of 15 year-olds. Something cold and old becomes hot and lively as the lecturer breathes life into the material. The best lecturers bring artistry and fireworks to the classroom. They can light fires.

Good lecturers do tons of extra reading and research into the topic

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before us. They save us the trouble of doing our own exploration, having "turned down the corners" on the best pages. They synthesize, summarize and report the "best parts." Knowing their audience, they are able to translate what might otherwise seem foreign, confusing, boring or overly abstract into a half hour of explanation and illumination. They act somewhat as tour guides.

They build bridges which take us to the other side . . .

Schools are meant to guide the young to our best information, the wisdom of the ages as well as the best insights of our best thinkers. As Sven Birkerts points out in The Gutenberg Elegies (ISBN 0-449-91009-1 -Fawcett Columbine, NY, 1994), the new media can flatten history and deprive us of perspective. Everything is NOW. History can almost seem to disappear along with many of the best thinkers of the previous century and decade as the digital world brings its focus to the present and the future.

Good textbooks and good lectures remain an essential method of organizing what the civilization has learned into synthesized "chunks" which make learning efficient, appetizing and sometimes enlightening.

II. The Limitations of Constructivist Learning and Primary Sources

In previous articles I have argued the case for equipping students with Information Power, by which I have meant the ability to "make up their own minds." Given the rapid change and the complexity of information sources facing citizens of the next century, our students must be capable of making their own meanings even when confronted by complexity, ambiguity and info-glut.

In order for students to acquire such information skills, they must have ample opportunity to launch investigations and explore real questions, an approach which goes by a number of different names . . . constructivist learning, engaged learning, problems-based learning, etc.

Judging from the research of Goodlad, Sizer and others, we have much work to do if we hope to see students engaged in such learning much of their time in school. The lecture and the textbook have a firm grip on many classrooms.

At the same time I would argue for a greater emphasis upon such student centered learning, I would also argue the need for balance between the different kinds of learning experiences. Both are needed because constructivist learning can be very slow, very inefficient and somewhat unreliable. At its worst, constructivist learning can reinforce ignorance, reward prejudice and keep students in the dark.

Problems of Time . . . If we tried to implement an entirely "constructivist" approach to learning U.S. history with nothing more than primary source materials, it would take forever to move beyond the diaries, documents and the raw data. Our students could easily spend months buried in the wonderful, emerging digital collections of the The Library of Congress, for example, without necessarily gaining much insight.

http://memory.loc.gov/

Note: The Library of Congress was not operating when we went to press on Memorial Day weekend.

Problems of Understanding . . .

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Imagine we asked our students to figure out from the photographs in the Detroit Publishing Collection of the Library of Congress what it was like to live in a tenement in a large American city at the turn of the last century.

We might show them how to perform efficient word searches to find all the photographs showing "tenements," "slums," "ghetto" and related terms. We would ask them to use their visual literacy skills to interpret their findings.

Try it yourself before reading on. Do a search a search for "tenement" and then look at all the pictures.

What can you report about the quality of life in those tenements? Are there any surprises? What is the truth?

Problems of Skill . . . Historians are trained to weigh evidence from various sources as they try to make sense from all of the time fragments. They would be smart enough to balance the Detroit collection with a half dozen other collections. They might spend some time learning about the photographers themselves to see if they had a tendency to select certain aspects of reality and filter out others. They would be wary of making too much meaning from these particular photographs alone. They would seek many different sources. But they are trained to do so and out students are not. It is too easy to confuse information with truth.

The Library of Congress recognizes that teaching with primary sources requires new skills and new approaches. To support teachers in working with their materials, they have developed the Library of Congress Educator's Page, a page full of resources to help teachers and students learn about using the kinds of primary source materials available online.

Conclusion

The Information Highway is no panacea. Nor is constructivist learning the answer to all our needs. Merely having more information more readily and rapidly available does not necessarily bring us any closer to the Truth. In Data Smog : Surviving the Information Glut (ISBN: 0060187018, Harper Collins,1997) David Shenk illustrates the dangers of too much information.

During the rush to hook up to the Information Highway, wise schools will retain at least some of those information delivery systems which synthesize, summarize and share basic insights, stories and concepts in an efficient manner which includes a reasonable degree of filtering and focus. They will continue to make good use of textbooks and lectures when appropriate, but they will also move to a balance with constructivist approaches.

Knowing that working with raw data and primary sources can be very frustrating and very confusing for both teachers and students, wise schools will invest in the scaffolding required to support meaningful investigations. Constructing meaning requires a very strong skill base which can only be acquired through a substantial investment in staff development aimed at developing Information Power and Information Literacy.

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SOME OF THE FILES IN THE COMPUSERVE UK EDUCATION LIBRARIES

ADDRESS.TXT
Title : A file of usefull addresses that have appeared in Keywords: ADDRESSES ADDRESS HELP
A file containing the addressess of various organisations that have been mentioned in the forum over time. This files is being added to and updated as time goes by. this version uploaded 09/April /1997

EMOTIC.TXT Title : Emoticons; symbols; and chat shorthand Keywords: EMOTICONS SYMBOLS ABBREVIATIONS ICONS
A text file of all the emoticons you are ever likely to need while emailing and chatting in cyberspace and a fair list of abbreviations too.

ACCRO.TXT Title : A file of accronyms used in education Keywords: HOW ACCRONYM ABBREVIATIONS MESSAGE MESSAGES
A short text file that I have put together from accronyms used in the forum message section and library from AD/DS to TSI. This file will be updated as time goes by. This version uploaded 26 03 97

UPLOAD.GIF
Title : Gif showing how to upload a file to the Forum Li Keywords: HOW UPLOAD FILE FORUM LIBRARY
A .GIF formatted file on uploading files to the forum Library. This can be VIEWED online or downloaded and Viewed off line by using FILE then OPEN commands the file will be stored in most Windows based commputers in C:\Cserve\download.

EXTENDED.TXT Title : List of extended ascii characters Keywords: ASCII CHARACTER FOREIGN LANGUAGE HOW
List of the full range of characters that can be used in standard ascii, usefull for working in European languages Other than English includes little things like i s m =>

UPLOAD.TXT Title : How to upload files to the ibrary text format Keywords: HOW UPLOAD TEXT LIBRARY CONTRIBUTE
How to upload files to the library using binary and plain text .txt files. This is in Text Format UPLOAD.txt Also in liibrary as as upload.wps in MSWORKS 3 format

AUTO-P.TXT Title : Auto-Pilot Keywords: AUTO-PILOT
How to turn on automated message retrieval for WinCIM (NOT for CSI 3)

COPYRITE.TXT Text, Bytes: 10893, Count: 14, 12-Dec-96 Last:06-Apr-97
Title : Copyright Online Keywords: COPYRIGHT LAW LEGAL ONLINE INTERNET
Copyright online is similar to that in the "real" world. This article from PC Novice (May 1996) explains how copyright law applies online. Reading this article can prevent legal hassles, or at least prevent sysops from removing your message. UK laws may vary slightly, but the general concepts still apply. Uploaded at the request of Sysop Quentin Elphick by Mark Sherman of the World Community Forum (GO WCOMMUNITY) only after

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obtaining permission from PC Novice (74644,3017). For subscription information, call (800) 424-7900 (U. TUTANKHA.

Title : Tutankhamen Investigation Keywords: TUTANKHAMEN

This is an investigation about Tutankhamen.

WGM.SEA Bin, Bytes: 999552, Count: 3, 20-Nov-96 Last:08-Dec-96

Title : Weather Graph Maker Keywords: WEATHER GEOGRAPHY SCIENCE DATA-HANDLING PRIMARY

A stand-alone HyperCard stack (created with HyperCard 2.3) based on Apple's Graph Maker stack. Enables weather data to be graphed easily - contains data on rainfall and temperature from Chester.

UPLOAD.WPS Title : A file on how to upload to the library Keywords: HOW UPLOAD LIBRARY CONTRIBUTE

How to upload files to the library using binary and plain text .txt files this is in MSWORKS3 format as upload.wps also in Text Format UPLOAD.txt

1066-BOH. Title : The Battle of Hastings Keywords: 1066 NORMANS ANGLO-SAXONS SAXONS HASTINGS BATTLE CONQUEST KS2 A look at the events and personalities that led up to and were involoved in the Battle of Hastings in 1066, the only date in history most English people ever remember! Wordstar formatted text

OLR.ZIP Title : Offline Readers Summary Keywords: OFFLINE READERS SUMMARY WINDOWS OLR CSNAV NAVCIS OZWIN

Offline Readers for Windows (OLR) CSNav NavCIS OzWin Summary of my time trialling them. Word/Wordpad Document Zipped

PORTBK.DOC Title : Using Portfolios for CPD Keywords: PORTFOLIOS CPD

Article first published in Training & Development 1994. Re-worked and published in an altered format in a Kogan-Page book.

F-MAC160.ZIP Title : Macro Virus scanner for WORD 6 & 7 Keywords: VIRUS SCANNER WORD 6 7 F-PROT DATA FELLOWS

F-MACRO - Scanner and disinfector for MS Word document macro viruses Copyright (c) 1996 Data Fellows Ltd F-MACRO is a DOS program which searches Word 6.x and 7.x document files for known Word macro viruses and disinfects them by disabling and overwriting the viral macros. F-MACRO is able to parse the complex OLE2 file structure of Word document files making it very fast and accurate. NOT SHARE OR FREE WARE... Schools go out and Buy a copy! Read the read me file.

INTCOWPS.ZIP Title : Internet Control Manual Keywords: INTERNET ACCESS CONTROL PARENT TEACHER CHILDREN RESTRICTIONS

INTCOWPS.zip is a ZIPPED illustrated MS Works formatted file explaining how to get and set up software to restrict access to the Internet. The same file is in both Staffroom and the Parents libraries. You will need WINZIP (library 1 Forum help and information) to extract this file. Another file Ciscontr.zip explains how to use CompuServes internal controls. Once extracted these files are read by Microsoft Works and Word.

HMLOGO.GIF Title : UK ED forum logo Keywords: UK EDUCATION FORUM LOGO GIFF IMAGE

Laura Griffiths (LOLA Multimedia) final draft for the UK Education Forum logo

CONFEREN.TXT Title : How to Conference Keywords: HOW CONFERENCE HELP CHAT
A text file covering virtually "Everything you'll ever need to know on conferencing" (chatting in real time).

VIRUS.TXT Text, Bytes: 4396, Count: 54, 09-Sep-96 Last:06-Apr-97
Title : All about virus's Keywords: VIRUS HELP HOW
A text file discussing virus's: What they are and what CompuServe is doing to prevent them.
SEND-MSG.TXT Title : How to post messages in a forum Keywords: HOW POST MESSAGES HELP
A text file explaining how to post messages within a forum

CISCONTR.ZIP Title : How to set up controls in CompuServe Keywords: HOW CONTROLS PARENTS PARENT TEACHERS SAFETY
How to set up Controls for CompuServe A zipped file explaining in detail with images, how to get and set up controls in CompuServe. Readable in Microsoft Works and Microsoft Word for Windows If you do not have WinZip to extract this file, you can get it in Library 1. A copy of this file is also available in library 5; Parents. intcowps.zip, is also available, a file on restricting access to the internet

HOWMAIL.TXT Title : How to send E-mail (Text file) Keywords: HOW SEND E-MAIL HELP
A text file explaining how to send E-mail.

RULES.TXT Text, Bytes: 6280, Count: 63, 04-Sep-96 Last:08-Apr-97
Title : Welcome Info & FAQS Keywords: WELCOME INFORMATION FAQOW
A text file containing Welcome information, including getting started in the forum, frequently asked questions, and Compuserve & Internet controls. Also available as a Microsoft Works file
RULES.WPS Bin, Bytes: 10752, Count: 31, 04-Sep-96 Last:07-Apr-97
Title : Welcome information FAQS Keywords: WELCOME INFORMATION FAQS GETTING STARTED HOW
A Microsoft Works document giving details of the forum, including frequently asked questions, and details of CompuServe and Internet controls.

SNAPPY11.ZIP Title : A shareware utility to take snapshots of your co Keywords: SNAPSHOT UTILITY SHAREWARE
A very useful utility to take snapshots of your computer screen (or parts of). You will need to download WinZip from library one to extract the files from this zipped file. This software is shareware, please read "readme.txt" within zipped file and register.

MYSMIL.TXT Title : List of smileys Keywords: SMILEYS ACCRONYMS
It's the first Jeanyus On-line Smiley Encyclopedia. Has a large list of smileys. Almost three pages long. Download them and use them.

WINZIP95.EXE Title : Winzip for Windows 95 Keywords: WINZIP ZIP UNZIP FILE COMPRESSION
WinZip brings the convenience of Windows to zipping Includes built-in support for popular INTERNET file formats: TAR, gzip and Unix compress New WinZip Wizard makes unzipping even easier This is a Windows95 version. "The best all-purpose file-compression utility" Windows Sources 3/96 "The best zipping and unzipping program you can find Computer Shopper 10/95 "The best of the Windows ZIP utilities" PC Magazine 9/12/95 This is shareware, if you use it

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please register it!

WZ16V61.EXE Title : Winzip Keywords: WINZIP ZIP UNZIP COMPRESSION

WinZip brings the convenience of Windows to zipping Includes built-in support for popular INTERNET file formats: TAR, gzip and Unix compress New WinZip Wizard makes unzipping even easier This is a Windows 3.xx version. "The best all-purpose file-compression utility" Windows Sources 3/96 "The best zipping and unzipping program you can find Computer Shopper 10/95 "The best of the Windows ZIP utilities" PC Magazine 9/12/95 This is shareware, if you use it please register it!

SOME USEFUL ADDRESSES FROM THE SAME SOURCE

The Association of Colleges at 7-8 Rathbone Place, London W1P 1DE Association of British Correspondence Colleges 6 Francis Grove London SW19 4DT Tel 0181 544 9559 Publishes a free list of member colleges and their courses

British Herpetological Society, Pinetree Lodge 30 Enfield Road Moordown Bournemouth

Cedar Education Trust 5-7 Stafford Road Forest Gate London E7 8NL Tel 0181 470 7125 support for Christian home educators, based at a Christian school run by head master with home educating experience. Curriculum guidelines

Christian Educational Materials Otterhill Farm Rowtown Addlestone Surrey KT15 1HD Tel 01932 855918 (6pm - 8pm Mon - Sat) send 4x1st class stamps for full catalogue. Publications of interest to all home educators, not just Christian. Many American titles not easily available elsewhere in UK

Count Me In PO Box 7 LONDON W5 2GQ 'Count Me In' is a FREE publication from the BBC, that is aimed really at adults who've forgotten or never learned the rudiments of maths. It's well presented also useful for people with a good grasp of maths as an aid in helping their children. They also have an accompanying CD-ROM which costs £2.50 incl p+p from the same address.

Eastbourne College of Art and Technology St Anne Æs Rd Eastbourne E Sussex BN21 2HS Tel 01323 644711 extn 299 (Malcolm Pither, Computer Training Services Manager) e-mail ecat@fastnet.co.uk Offering two courses in Pascal and C programming on the internet. Cost £50 - £60

Environmental Agency Northminster House, Northminster Road Peterborough PE1 1UA

Examination boards:

University Of London Examinations and Assessment Council Stewart House, 32 Russel Square, London WC1B 5DN.

Midland Examining Group 1 Hills Road, Cambridge, CB1 2EU

North Examinations and Assessment Board Devas Street, Manchester, M15 6EX

North Ireland Examinations and Assessment Council Beechill House, 42 Beechill Road, Belfast BT8 4RS

The Further Education Development Agency publish several publications on business developmet issues such as marketing. They are based at Coombe Lodge, Blagdon, Bristol BS18 6RG.

FEFC (Further Education Funding Council) Cheylesmore House, Quinton Rd, Coventry CV1 2WT. Publish reams of statistics including a recent set of Performance Indicator statistics. Also publish an Annual Report on FE.

GABBITAS 6 Sackville Street London W1 Tel 0171 734 0161 Fax 0171 437 1764

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Assistance with finding private tutors in the London area. Also find work for teachers

HomeService48HeatonMoorRdHeaton Moor Stockport SK4 4NX Tel 0161 432 3782 Christian organisation offering free testing for 8 - 14 year olds. Membership £10pa

International GCSE IGCSE Office Syndicate Buildings UCLES 1 Hills Road Cambridge CB1 2EU Tel 01223 553311 Fax 01223 460278 ..send for information leaflet and introductory booklet

Irish Home Educators' Association c/o Theresa and John Murphy Clahane, Ballyard, Tralee, Co. Kerry, Ireland

ISIS the independant schools information service on 0171 222 7274 They publish a yearbook listing all independant schools in the country stating whether boarding or day, number of pupils, fees, etc

Joint Council for the GCSE Devas Street Manchester M15 6EX Tel 0161 953 7557 Fax 0161 953 7558 e-mail jointforum@neab.ac.uk ..contact for the addresses of examining boards. Help with queries about the GCSE exam

Junior to GCSE Correspondence Courses Roger Freeborn 4 North Fen Road Helpringham Sleaford Lincs NG34 0RR Tel 01529 421218 Maths, sciences, English with literature, law. Approx. £5 per month per subject

Mercers College Ware Herts SG12 9BU Tel 01920 465926 Fax 01920 484909 Modules and tutorial support for 5 to 18 year olds. Free brochure

Midland Examining Group 1 Hills Road, Cambridge, CB1 2EU

NAGM (National Association of Governors and Managers) 21 Bennetts Hill Birmingham B2 5QP 0121 354 7375 Tel/fax 0121 643 5787

National Council for Vocational Qualifications 222 Euston Road London NW1 2BZ Tel 0171 387 9898 Fax 0171 916 5799 Monitors of awarding bodies for NVQs. Provide information on all aspects of NVQ.

National Extension College 18 Brooklands Avenue Cambridge CB2 2HN Tel 01223 316644 Fax 01223 313586 e-mail nec@dial.pipex.com Distance learning courses GCSE to Degree level. Also numerous self study courses in areas such as accountancy, marketing, counselling skills, desktop publishing (150 courses). Send for free brochure Open and Distance Learning Quality Control 27 Marylebone Road London NW1 5JS Tel 0171 935 5391 Fax 0171 935 2540 Free list of accredited colleges and their courses

NIACE, the Adult Learning National Organisation. They publish a booklet each year on summer courses and activities. Write to them at 21 De Montfort Street, Leicester.

North Examinations and Assessment Board Devas Street, Manchester, M15 6EX

North Ireland Examinations and Assessment Council Beechill House, 42 Beechill Road, Belfast BT8 4RS

The Open School Trust Park Road Dartington Totnes Devon TQ9 6EQ Tel 01803 866542 Fax 01803 866676 e-mail openschool@bbcnc.org.uk Curriculum planning guides - helpful if following the national curriculum. æTutafaxÆ tutoring by fax or e-mail - includes GCSE, A Level and Languages. æTelewebÆ - interactive closed bulletin board for children. Kit to aid æuntrainedÆ people to teach literacy to 5 to 8 year olds who are struggling to read and write.

Open University Walton Hall Milton Keynes MK7 6AA Tel 01908 274066 Fax 01908653744 email..(Name)@open.ac.uk web site..http://www.acs-info.open.ac.uk/ Correspondence courses for over 18 year olds, no previous qualifications necessary. Some tutorials and summer schools. Degree, Diploma

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and Certificate courses. Many free introductory leaflets
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Open University FREEPOST P O Box 625 Dane Road Milton Keynes MK1 1TY
Open University Press Celtic Court 22 Ballmoor BUCKINGHAM MK18 1XW Tel 01280 823388 Fax 01280 823233 e-mail enquiries@openup.co.uk
Oxford Open Learning 43a Botley Road Oxford OX2 0BN Tel 01865 794357 GCSE and A Level tutor led home study courses Send for Home Study Prospectus (They are so confident of their quality that they make a money-back promise if you fail an exam)
The Oxford Reading Tree Scheme, which is published by Oxford University Press. There is an internet site for Oxford Reading Tree, and the telephone number of 'The Oxford Reading Tree Care-line' is 01865 267881
PNEU (Parents National Education Union) Mrs V Trenbarth Dormer House School High Street Moreton in Marsh Gloucestershire GL56 0AD Tel 01608 650758 Schools that follow a Charlotte Mason approach

Rapid Results College Tuition House 27-31 St George/Es Road London SW19 4DS Tel 0181 946 7584 Fax 0181 947 2211 e-mail rrc@solo.pipex.com Correspondence courses
SEMERC 1Broadbent Road, Watersheddings, Oldham OL1 4LB tel - 0161-627-4469 Fax 0161 627 2381 e-mail info@semerc.demon.co.uk Produce a variety of software packages.There are loads of different discs and screens aimed at different areas of the curriculum and different Primary children. Many are simply excellent and have great value - however they are not "games" and you need to pick out what you want for your particular needs It might be worth getting the catalogue.

Southern Examining Group Stag Hill House, Guildford GU2 5XJ
Steiner Bookshop Anthroposophical Society of Great Britain Rudolf Steiner House 35 Park Road London NW1 6XT Tel 0171 723 4400 All enquires about Steiner method, Steiner books and curriculae.
Steiner Schools Fellowship Kidbroke Park Forest Row East Sussex RH18 5JB Tel 01342 822115 Fax 01342 826004
The Teacher Training Agency Communication Centre PO Box 3210 Chelmsford Essex CM1 3WA Tel: 01245 454454 Fax: 01245 261668 email: teaching@ttainfo.demon.co.uk Internet: http://www.teach.org.uk
University Of London Examinations and Assessment Council Stewart House, 32 Russel Square, London WC1B 5DN.
Welsh Joint Education Committee 245 Western Road, Cardiff CF5 2YX
Worldwide Education Service (WES) 35 Belgrave Square London SW1X 8QB Tel 01716372644 Fax01716373411 Tutor led courses to follow the national curriculum for 3 to 12 year olds. Previously available un-tutored courses discontinued. Price examples - English £313 pa, Maths or Science £295 pa each. Free information pack

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RMUG TRAINING WEEKEND
October 24th to 26th 1997

After a very successful event in 1996 we return to the same venue **The De Vere Hotel, Swindon.**

We are offering you a weekend of training, most of which is 'Hands On'. You will experience courses run by professionals and RM Staff will be available to help sort out your problems and give advice.

We hope to offer courses in CAD (Design View), PagePlus, Access, Integrating Word and Excel, Control (with Logicator), Modelling (using Model Builder), Multimedia plus time to try out software or to access the Internet. (Details to be published when finalised)

Why not bring along colleagues for their INSET Training?

The hotel has many sports facilities and there are many places to visit in the locality so, why not bring your partner and/or family?

What will it cost? Unfortunately the hotel has increased its charges and so regrettably we have to increase ours (but still only 8% on 1995)

Full Weekend - £270 (members) £295 (non-members*)
One Day Only - £95 (members) £120 (non-members*)
Partners £40 B&B (other meals to be paid for separately)
Other and Group Rates on Application.

Apply, with £50 deposit, to: RMUG Training Weekend
FREEPOST, ESHER, SURREY. KT10 0BR
or telephone Maureen Wernham on **0181 398 1948**

* includes a year's membership

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MICROMART & BITS AND PIECES

WANTED PC186 Keyboard, any condition, can repair. Also spare hardware, plug-in ROMs, interface (an IEEE488/HPIB interface would be useful) etc. Will pay! John Fell, 59 The Oval, Grimsby, DN33 3NW.

FROM:G Legg, 100576,3717 Re:New virus spreads itself via email

Another warning for you to pass onto your friends/colleagues:-The first computer virus that can replicate and send itself to another computer using email has been discovered in America and could have infected British computers. ShareFun contains nine macro viruses that infect Word for Windows (versions 6 and 7) documents. When an infected document is opened, the virus infiltrates the global template so that from that point on, all new documents created in Word contain ShareFun. Having ensured its reproduction, the virus then runs a random-number generator that gives it a one-in-four chance of searching the computer's hard disk to see if Microsoft Mail is used. If the email program is located, the virus chooses three random email addresses, generates a message and automatically transmits it to the chosen recipients. The macro virus is passed on within an attached infected Word document. "ShareFun is the first macro virus to commandeer an electronic-mail program and use that program to accelerate its own spread," said Jimmy Kuo, director of the anti-virus response team at McAfee, which located the first known outbreak of the virus last month. "The virus is especially pernicious in that it tricks its recipients into believing they were sent the file by a trusted friend." ShareFun-infected emails can be identified by the subject line, "You have GOT to read this!". Upon arrival of the email, recipients find a blank message with the attachment. If the document is opened, ShareFun is activated and will infect the recipient's computer, starting the replication and transmission process anew. Even if the target computer does not have Microsoft Mail, it can receive the virus, become infected (all newly created Word documents will contain the virus) and then pass it on when infected Word documents are distributed by email, on a corporate network or on a floppy disk. Fortunately, if MS Mail is not being used at the time, ShareFun attempts to create a message, and causes Windows to close down.

Dear All, I am pleased to officially announce the launch of the Educational Database Disk. The disk is available for PC and MAC. An Acorn version will be available from March 9th. Orders for all versions are now being taken. The disk is a 3.5" disk. Please note that the database is run from the disk and should not be donwloaded onto personal computers. Full operating instructions will be issued with the disk. A web browser is needed to view the pages.

The Institution database is organised into countries of which there are 52. These countries may be accessed by text or clickable maps. The teacher database has been arranged into subject areas. As well as my database I have put links to direct pages which give over 1000+ more contacts. I have also included a list of links to around 1000 web pages. The links are arranged under subjects. Each has been visited by me and a summary of the site is included. Links to educational newsgroups, listservs and telnet sites are also listed. Due to the success of the pre-release orders the price of the disk has

cont on p28

NEWS

EC WANTS DIALOGUE ON NEW INTERNET REGISTRATION PLAN The European Commission has asked the U.S. government to articulate its policy on various issues involved in revamping the Internet domain name registration system, and has requested a dialogue with the U.S. on how best to respond to the International Ad Hoc Committee's proposal to create seven new top-level domains, to be managed by up to 28 new domain registrars. The EC also criticized the IAHC for excluding EC representatives as members. An EC spokeswoman noted that the recommendations would not solve the overcrowding among .com names, and would probably contribute to trademark disputes. The Commission, in its comments, also rejected the IAHC's suggestion that the 28 new registrars be chosen by lottery: "We question whether the IAHC or the Internet Society has the authority under U.S. or International Law to do so and doubt that the decisions taken this way would constitute the necessary basis for the legal and commercial stability of the eventual Registrar organizations." (BNA Daily Report for Executives 25 Apr 97)

NRC RECOMMENDS FULL ACCESS TO SCIENTIFIC INFORMATION The National Research Council has released a report recommending that governments around the world guarantee access to electronic databases of scientific information by researchers, educators and others "working in the public good.... Full and open access to scientific data should be adopted as the international norm for the exchange of scientific data derived from publicly funded research." The report warns against proposals currently under consideration by the World Intellectual Property Organization, the European Community and the U.S. House of Representatives, saying they do not guarantee "fair use" of data by the scientific and education communities. "If adopted in their current form, these legal proposals could jeopardize basic scientific research and education, eliminate competition in the markets for value-added products and services, and raise existing thresholds to entry into insuperable legal barriers to entry." www.nap.edu/ (Chronicle of Higher Education 25 Apr 97)

INTERNET HOME TO HUNDREDS OF GET-RICH-QUICK SCHEMES The Federal Trade Commission teamed up with securities regulators and attorneys-general in 24 states last month, and in one day of Web surfing found 215 cases of "marketers touting the potentially fantastic earnings to be made by consumers who buy into their business-opportunity schemes." The claims included one touting earnings of $78,000 a year selling food from vending carts, one claiming earnings up to $100,000 a year for grooming pets, and one advertising income of $20,000 a month operating "900" phone services. The FTC warned each questionable marketer that such claims must be substantiated by solid evidence. When it tried to revisit the sites last Monday, 37 had shut down and seven had deleted or changed their statements. "We encourage consumers surfing the Web for new business

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opportunity to insist on seeing substantiation for every objective claim a company makes, as well as a list of every person who has signed up for the business," says the director of the FTC's Bureau of Consumer Protection. The FTC says surfing the Web will be a regular part of their enforcement activities. (Wall Street Journal 25 Apr 97)

NEW INTEL CHIPS INSPIRE PRICE REDUCTION ON OLDER PCs In anticipation that Intel will cut some chip prices next quarter by nearly 40% as part of a transition to its next-generation Pentium II processors, computer manufacturers have decided to announce price reductions on their current PCs with older technology. (San Jose Mercury News 26 Apr 97)

COMPUSERVE, AFTER TIME-OUT, CALLS TIME-IN CompuServe and Time Inc. have ended a breach-of-contract dispute and planned to restore Time magazine content to CompuServe's online service. CompuServe had attempted to terminate the contract in January after deciding that Time's online content was not of sufficient value to continue the agreement. (AP 26 Apr 97)

EUROPE LOOKS TO SHORT-TERM PROGRAMS FROM THE U.K. Many European companies, lagging behind England in the application of information technology to business problems, are paying young programmers from the United Kingdom as much as $3,200 a week if they are experts in Java, database systems, or the Internet. The programmers work on short-term projects. "German companies are slowly warming to the concept of part-time workers who come in for three months to do a special job and then leave." (Financial Times 25 Apr 97)

JUDGE THROWS OUT KEYBOARD VERDICT A federal judge has thrown out a record-breaking $5.3-million verdict against Digital Equipment Corp. after new evidence indicated the plaintiff's wrist injuries were caused by a neck condition unrelated to working conditions. However, in a separate ruling, the court upheld a smaller, $274,000 verdict awarded to a co-plaintiff. The judge also threw out a third $302,000 ruling awarded to another co-plaintiff, saying the statute of limitations had expired. The first plaintiff's lawyer says they plan to appeal the decision. (Wall Street Journal 30 Apr 97)

XEROX TECHNOLOGY PROTECTS ONLINE COPYRIGHT Xerox has developed a Digital Property Rights Language (DPRL) that encrypts any digital work—book, movie, software or other—and delivers it in a "digital envelope" to a recipient with a designation as to how the recipient may use that work: "For instance, a Web publisher could watermark a file if it is printed or disallow printing unless it is sent to a trusted printer." The company, which began developing DPRL four years ago, is now converting its software to Java, ensuring that DPRL will run on all platforms. www.parc.xerox.com/ (InfoWorld Electric 26 Apr 97)

MINING COMPANY DIGS UP NET GOLD The Mining Company, brainchild of former Prodigy exec Scott Kurnit, offers a directory of about 300 Web sites selected by a cadre of free-lance workers who dig up eclectic sites to add to the mix. "We've found the elusive 500 channels," says Kurnit, who hopes to have 1,000 sites listed by year's end, and 2,500 in 1998. "In a 500-channel world, you'd have a NASCAR channel," he says. "You start to get more eclectic." So far, the Mining Company boasts nine large advertisers, including IBM, Big Yellow and Moet. "The big question is, can a number of people

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do this and do this by pointing to quality sites?" asks Kurnit, who hopes his new venture eventually will supplant many of the one-size-fits-all search engine sites. www.miningco.com (Broadcasting & Cable 28 Apr 97)

GATES: MICROSOFT NEWS WON'T COMPETE WITH NEWSPAPERS Microsoft chief executive Bill Gates told a group of newspaper publishers that their industry should not get "overly paranoid" over Microsoft's news partnership with the NBC television network and the development of information products for the general public. He said he has no plans to sell classified ads or hire local news reporters. "Don't think of Microsoft as a primary competitor here, but think of us as somebody who can provide technology." (AP 30 Apr 97)

NETSCAPE CEO TO WORK FOR FREE THIS YEAR Acting on the conviction that his personal compensation should be linked to the long-term interests of the company and its shareholders, Netscape chief executive James L. Barksdale has elected to forego any salary or cash bonuses for 1997 because Netscape stock fell by two-thirds last year. (New York Times 1 May 97)

STANFORD'S HIGHWIRE PRESS IS HIGH FLIER IN ONLINE PUBS Stanford University's HighWire Press, based at the University's Cecil H. Green Library, is breaking new ground in electronic publishing, focusing on scientific journals by scholarly societies. HighWire's staff works with journal editors to design their online versions, and inserts hyperlinks to related material on the Web. Associations pay HighWire between $35,000 and $125,000 for online journal development, plus several thousand dollars per month in maintenance costs. Since signing on as HighWire's first customer, the Journal of Biological Chemistry has experienced a 15% increase in article submissions: "One hypothesis is that because JBC has got this global distribution, because the hyperlinking has been so terrific, because the hypernavigation is so good, because you can blow up these images and get really good pictures of gels that are really workable in a lab, more authors are sending stuff the JBC," says HighWire's publisher. A secondary benefit from the project is the fact that the online journals now are available to new markets, such as Russia and India, where paper versions are difficult to access. Other universities, including Johns Hopkins University, the Massachusetts Institute of Technology, the University of Chicago and the University of California at Berkeley, are involved in online journal projects, but Ann Okerson, an associate university librarian at Yale University, says the HighWire project is unique because of its close association with a university library and its efforts to work with a number of publishers. (Chronicle of Higher Education 16 May 97)

COMPUTER ACCESS AND MINORITY STUDENTS A report by the Educational Testing Service suggests that "there are persistent patterns of inequity in student access to technology. The kids with the most needs are getting the least access." Nationally, schools average one computer for approximately every 10 students, but where minority enrollment exceeds 90% the rate is approximately 1 to 17. (Washington Post 15 May 97)

ROCKERS SOCK IT TO WEB THIEVES The British rock band Oasis says it will file lawsuits against hundreds of Internet sites for unlawful use of copyrighted photographs, video clips, song lyrics and sound samples without permission. The sites have been given 30 days to erase the illegal material. A statement from the band expressed appreciation for being

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honored by "fun and interesting" fan sites but emphasized that unauthorized use of copyrighted material "can be seen as theft." (Financial Times 15 May 97)

MACHINES THAT THINK AND MACHINES THAT FLY On the issue of whether the chess-playing computer that beat world champion Garry Kasparov can "really think," Yale computer science professor Drew McDermott says: "Saying that Deep Blue doesn't really think is like saying an airplane doesn't really fly because it doesn't flap its wings." (New York Times 14 May 97)

*TechWeb Technology Encyclopedia. Does that acronym have you stumped? Or you just have to know the definition of a codec? Ponder no more. TechWeb brings you a high-tech dictionary, where you can find what you're looking for. Find it at http://www.techweb.com/encyclopedia/defineterm.cgi.

*Calculators On-Line Center. Visitors will find an amazingly thorough collection of calculators including mortgage calculators; 12 different retirement and benefits calculators; plus calculators for figuring equations related to agriculture, automobiles, games of chance, calendars, cameras, clothing and shoe size, Morse code, telephone traffic, cooking and beverage, distance, finance (including college financial aid); and more. See it to believe it at http://www-sci.lib.uci.edu/HSG/RefCalculators.html.

International University (IU). With the goal of becoming the nation's first accredited "virtual" university, IU has been awarded candidacy for accreditation by the North Central Association of Colleges and Schools. Founded by Jones International as the first independent degree-granting distance education university, IU views their candidacy as setting an example for all future online educators. For more information, contact Shannon Geary at sgeary@jec.edu.

8th Joint European Networking Conference-Diversity and Integration: The New European Networking Landscape. May 12-15, 1997. Edinburgh, Scotland. Contact: http://www.terena.nl/jenc8/.

INET'97 - The Internet: The Global Frontiers. June 24-27, 1997. Kuala Lumpur, Malaysia. Contact: http://www.isoc.org.

National Educational Computing Conference: Potlatch. June 30-July 2, 1997. Washington State Convention & Trade Center, Seattle, Washington, U.S.A. Contact: Tony Jongejan tel: 360-650-3090, fax: 360-650-6526, necc97@wce.wwu.edu.

*The Library of Ideas. The Library of Ideas, a new service of the Idea Channel (http://www.ideachannel.com/Index.html), features videos of leaders in a wide range of disciplines discussing their research and ideas. The videos are rich in new thinking and presented at a level understandable to the motivated lay person. Topics range from astronomy to medical science and speakers include Nobel Peace Prize winners Gary Becker (economics), Norman Borlaug, Linus Pauling (chemistry), and Charles Townes (physics). Abstracts, transcripts, and videotapes are available to order online.

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from p24

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PRINTER'S PIE
by Peter Harris

THE SCIENCE OF SCANNING AND THE ART OF IMAGE MANIPULATION

"And see, not blinded by our eyes"

The above quotation from one of my favourite poets, Christopher Fry, perhaps refers to "seeing through" people rather than using one of our five senses, or as the man in the Adobe adverts says: "I know they're *looking* but are they *seeing*." In his book CLIMBING MOUNT IMPROBABLE Richard Dawkins makes a valiant effort to explain how eyes evolved – there are so many different forms of eyes that biologists have wondered if they have evolved not once but many times. Recent experiments, when scientists transferred the gene responsible for the eye in squid into fruit flies (resulting in their growing eyes in places where their wings, legs and antennae normally grow), seem to suggest that all forms of eyes in different species are merely variations on a basic theme.

Because sight is so important to us anything that aids its use is to be welcomed, and the scanner (which is the exact opposite of the printer) enables us to place certain digital information on the computer screen where we can see it and then transform it. For most people information gets into their computer by being typed on a keyboard; or it enters the memory bank from a disk, from another computer in the network, or even via a modem. But one type of information can't be typed, downloaded, or recorded from a microphone: visual information.

Digital Artistry

J. S. Bach wrote "The Well-Tempered Clavier" in response to technical improvements in the way that music was written and played – before this time A sharp and B flat were two distinct notes. Titian painted allegorical subjects such as "Bacchus and Ariadne" in the bright colours of Venetian sunshine; Rembrandt painted subjects such as "The Night Watch" that showed the impact of one ray of light (it was unfortunate that the officers wanted a collection of recognisable likenesses, not a masterpiece!). This illustrates that great artists respond to the age in which they live. I am convinced that present-day masterpieces will be produced using the computer and image-manipulation software; effects can be achieved this way that cannot be matched by any other.

When the largest ever production of SWAN LAKE by the English National Ballet takes place this month in the Albert Hall,

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large portraits of the dancers by Harold Reichhold, an experimental digital artist, will be hung on the walls of the concert hall. He uses an Olympus 35mm camera to take transparencies which are then scanned into a computer, where they are manipulated. A completed image can take anything from three to 150 hours to produce. Reichhold has added texture, colour and, most importantly, atmosphere to the traditional images. "Photography to me is like a rough sketch," he says. "I try to achieve a mixture between reality and imagination." A neat mixture of science and art!

Draw or Paint?

Someone told Dr. Stephen Hawking that each equation he included in his book A Brief History of Time would halve the sales. In the end he only included Einstein's famous $E=mc^2$, hoping that would not put off half of his potential readers!

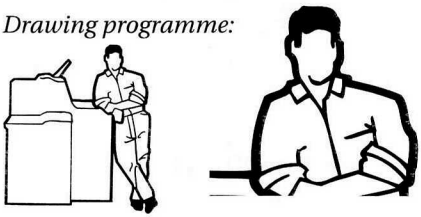
It would be encouraging to beginners if one could write about scanning without being technical but "dpi", "ppi" and "lpi" (not to mention CMYK and RGB, or EPS, TIFF and JPEG) demand clarification. When we bought our first scanner I must confess to being completely bewildered with the mass of terminology.

The first priority is to explain the difference between drawing programmes such as Adobe Illustrator, Macromedia Freehand and CorelDraw and image-manipulation or painting programmes such as Adobe Photoshop, Corel PhotoPaint, PixelPaint, Color It and PC Paintbrush.

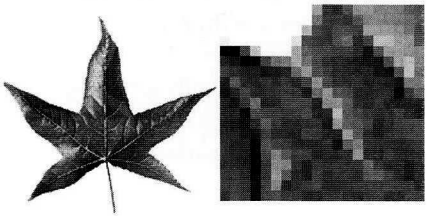
Drawing programmes produce objects, which are independent, mathematically-defined lines and shapes. The principal advantage of clip-art produced by a drawing programme is that it can be enlarged without any loss of definition.

In contrast, when you draw a line in a painting programme it converts it to tiny square dots called pixels. When I visited the Roman Museum in St. Albans on display was a mosaic – the closer to it you were, the easier you could see the individual components; the further away you were, the more the individual components blended together. The following successive enlargements should illustrate this point.

Drawing programme:



Painting programme:



Most computer users understand that when an inkjet-printer outputs at 300 dpi (dots per inch) or a laser-printer outputs at 600 dpi, the quality of the latter is superior to that of the former - and that 300 dpi means that one square inch would contain 90,000 dots of ink that we could view as dots under a microscope.

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If we say that a monitor's resolution is 72 ppi (pixels per inch), most people can grasp that one square inch will contain 5184 separate pixels, which in the case of a black-and-white monitor are either black or white.

But what are lpi (lines per inch) and what is their link to dpi? In one word: GRAPHICS.

The Great Illusion

Tony Curtis and Janet Leigh (then husband and wife) made a successful film about Harry Houdini, and "Jonathan Creek" has been intriguing Saturday evening viewers. We like to be puzzled.

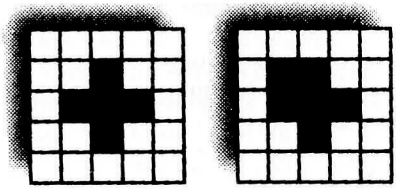
In the early days of printing, pictures were produced using woodcuts and later by using engravings. Albrecht Dürer's "Praying Hands" are justly famous (his godfather was the bookseller and expert printer Anton Koberger).

But how can we print different shades of grey as well as black and white? The answer was, to print using black ink and give an illusion of grey by means of a "halftone screen." In the days of letter-press printing, light from an image was passed through a fine screen onto an emulsion which was light-sensitive, and then turned into a "block" which in effect was a series of halftone cells.

The image of an eagle printed in the next column and enlarged so that you can see the individual cells should show this. If we were to print using red ink instead of black, the image would give the illusion of pink instead of grey.

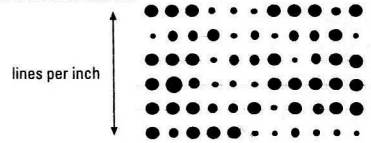
The average laser-printer also uses the halftone screen to give the illusion of grey. It does this by organising the printer pixels into clusters called *halftone cells*. On 300 dpi laser-printers the default frequency is 60 halftone cells per linear inch. Because the resolution of the device is 300 dpi this means that each cell is 5 pixels tall by 5 pixels wide (300 divided by 60 equals 5).

This means that each halftone cell can have any number of black pixels from 25 to 1 as illustrated below.



Because these halftone cells in the 300 dpi laser-printer can vary in size from 25 black pixels, 12 black pixels, etc., in effect the clusters of pixels are viewed as dots of different sizes.

These dots are then laid out in lines as shown below.



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Types of Scanners

Transparencies are scanned using transmissive scanners, and prints and flat artwork are scanned using reflective scanners. In both types the varying intensities of light are usually converted into electrical charges by Charged-Coupled Device technology (CCD), and these charges are then converted to digital data.

Hand-held Scanners

PUNCH'S advice to those about to be married – *don't!* – probably applies to those thinking of buying one of these. At about £60 nowadays it is better to save up and buy a flatbed scanner, though a few years ago prices were vastly different. They are perfectly acceptable for scanning logos or postcards but a steady hand is needed. Professionals only use them when the object to be scanned is so fragile that it cannot be moved.

Pass-through or Sheetfed Scanners

The Visioneer PaperPort is perhaps the best example of these. An A4 sheet can be scanned and placed on the work area where, as an aid to the "paperless office," it can be printed out, faxed, stored in a file for later retrieval, sent to an OCR (Optical Character Recognition) programme *(more details of this later)* or to an image-manipulation programme such as Adobe Photoshop or Corel PhotoPaint.

A colour version is coming out later this year.

Flatbed Scanners

These represent very good value for money. A reasonable quality colour scanner can be bought for under £200. The process of scanning is very similar to that of making a photocopy – and most of our customers can use one of those!

Drum Scanners

It is a truth universally acknowledged, that you cannot get something twice as good by only paying twice as much. A Ferrari that goes twice as fast as a Mini (£462 when first on road!) isn't available for £18,000! Drum scanning has always been able to offer full resolution and imaging features regardless of where the copy was placed upon the drum. Flatbed scanners normally perform best with the copy placed in the centre and tend to be somewhat limited in magnification for this reason.

£25,000 will probably buy you a scanner that has an optical resolution of 3,175dpi over an area of 305mm x 432mm.

And the greatest of these is Software

"The Irishman fell on the floor – and missed it!" The Dutch apparently tell Flemish jokes and the Hungarians tell Romanian jokes. To many it must seem as odd as a racist joke that the most important thing about a scanner is not the machine but the software that comes bundled with it.

Adobe Photoshop has 75% of the professional market and can be bundled with most good desktop scanners for an extra £140. Corel PhotoPaint needs to be version 6 at least to have the necessary masks and layers to produce high quality work. Kai's POWER GOO and the shortly-to-be-released PHOTO SOAP are great fun for the amateur.

To be continued.

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GOT A PROBLEM?

One of the main functions of the RM User Group is to assist members who are having problems with either hardware or software, no matter how trivial or complex that problem seems to be. Members of the committee have a wide range of experience in the use of RM equipment, including systems no longer in production, and can be contacted in the evenings or at weekends...times when you are most likely to be mulling problems over and when RM's own Customer Support lines are unavailable.
RM themselves do not claim to have extensive knowledge of products which they don't produce themselves (such as Excel or Page Plus), and although they can tell you how to install such packages on their equipment and how to get started, they cannot be expected to give you in-depth support in using them. On the other hand, the RM User Group has a membership drawn almost exclusively from teachers using these products on a daily basis and consequently have probably "been there, done that, bought the T-shirt" and most likely even "made the jigsaw" too.
So do get in touch with a member of the Committee (see elsewhere in the magazine for contact details) if you are experiencing some difficulty or other or want some advice. If we can't solve the problem ourselves then we probably know someone who can, and if even that fails we can publicise the problem in the RMUG Magazine.

GOT ANY HINTS AND TIPS? GOT ANY GOOD TEACHING IDEAS INVOLVING IT?

If so, your magazine needs you! Look...it's like this: the RMUG magazine is entirely dependent upon contributions from members to fill its pages. This means you! We know for a fact that some members shy away from contributing articles because they feel themselves not to be experts. Don't kid yourselves: if you've done an interesting lesson in your subject from an IT point of view, then you're an expert and we'd like to hear about what you did. What you write doesn't have to have high "nerd appeal"...in fact, forget the "anoraks" completely because most members are normal people like you. Honest.

The editor welcomes all manner of items from "one-liners" to classroom ideas and software reviews, so get writing and make his day (he'll even pay £5 per printed page if he likes it.....Just think: two two-page articles and you've got your annual membership fee back.....).

If (If? When, surely?) you do write an article then the best thing is to submit it to the editor as a disk file in Word for Windows or Windows Write format. He's a reasonable chap so other word processor formats are probably OK too, but it would be worth checking first in case he hasn't got a copy of Edlin Lite for Windows 95. Alternatively you can e-mail it to him or sharpen a few goose quills (but please **not** carrier pigeons: they just make too much mess).

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If yes, with what age range do you work:

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Do you use a computer at home?

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MCB File Manager 3. This Windows utility is designed for schools where the normal Windows 3.0/3.1 File Manager is too complex/'dangerous' for unrestricted access by pupils. This utility restricts drives to those chosen by the Network Manager to be operated upon to perform deletions / copying / sub directory creation / formatting tasks. **Site licence only £24.95.** Our **free** demo disk is available on request.

MCB Pool utility for RM Net LM. This invaluable utility allows users on Net LM to transfer files to others with the minimum of fuss and delay. Especially useful for teachers to distribute files to a class of users. **With site licence for only £19.95.**

MCB Space utility for RM Net LM2. This Network manager's utility is used to monitor the disk space occupied by a user's home directory. As such, it functions in a similar manner to the NETDSK utility for RM Net3.x and can be set so as to prevent a user who has exceeded the allocated disk space, from completing the log on process until files have been deleted or moved to floppy disk. **This product comes with a site licence for only £19.95!**

MCB NetLog for RM Net LM2 This Windows utility for Network managers has to be **an absolute bargain for the site licence price of only £29.50. MCB NetLog** records all network log on and off information including Log on time, User ID, station address, Log off time, and illegal log off information. The data is then available via the Network Manager's database listing program which gives full database information as well as user and station summaries. The data is archived on command to a monthly file which is stored in CSV format for import into your own specialist analysis database.

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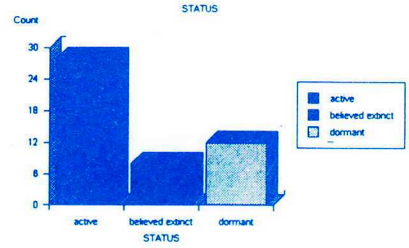
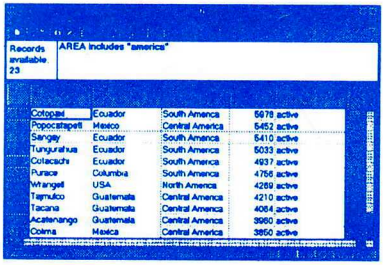
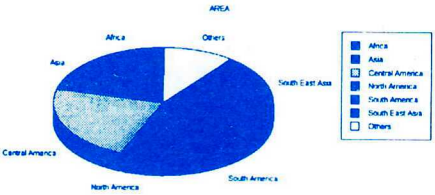



Records available 23
AREA includes "america"
Cotopaxi Ecuador South America 5678 active
Popocatapetl Mexico Central America 5452 active
Sangay Ecuador South America 5410 active
Tungurahua Ecuador South America 5033 active
Cotacachi Ecuador South America 4937 active
Purace Columbia South America 4756 active
Wrangell USA North America 4269 active
Tajmulco Guatemala Central America 4210 active
Tacana Guatemala Central America 4064 active
Acatenango Guatemala Central America 3960 active
Colima Mexico Central America 3850 active



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